BI3 Automated Exchange Transfusion for Sickle Cell Care

Scheme Name	**BI3 Automated Exchange transfusion for Sickle Cell Disease Patients**
QIPP reference	QIPP 16-17 S28-B&I
Eligible Providers	All providers of exchange transfusion for SCD
Duration	April 2016 to March 2018.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] for first year should achieve payment of £350 per automated transfusion for all patients targeted for automated transfusion in a year – both adults and children. Target Value: Add locally CQUIN %: Add locally
Scheme Description	
Patients with sickle cell disease require exchange transfusions to manage their condition. This can be done manually or using automated exchange. This CQUIN scheme aims to incentivise the use of automated exchange by specified specialist centres in order to improve patient experience and use of clinical resources. Implementing this CQUIN scheme may require investment in an apheresis machine if not available. Staff training will be required. Patient information will be required. This CQUIN scheme aims to remove resource barriers to using automated exchange in order to secure best access to care for all patients for whom it is appropriate. The payment amount is determined by the targeted number of patients requiring exchange transfusion each quarter, with a £350 payment per automated transfusion. Target is 95% of all transfusion patients. When calculating the number of transfusions likely in a year, account should be taken of any lead in time if a new machine must be acquired, and a norm of 8 ½ transfusions per year per patient. The £350 payment is appropriate for both adults and children. For example, a provider anticipating 60 patients requiring transfusion, and expecting to give 95% of them automated transfusions for three quarters of the year (i.e. c, 6.4 sessions), the CQUIN payment would be £127,680 If the contract value is £Z, this translates into a CQUIN proportion of 134,000/Z.	
Measures & Payment Triggers	
1. Numerator. % of Patients with sickle cell disease requiring exchange transfusion (according to the agreed assumptions, noting the 95% target) who receive this via automated exchange 2. Improvement. % receiving automated exchange increases in each quarter relative to that achieved on average in 2015/16.	

Partial Achievement Rules	
Payment in each quarter is conditional upon Trigger 2 (improvement relative to base year) being achieved. If trigger 2 is achieved, payment is proportional to achievement of Trigger 1, i.e. the number of automated transfusions achieved as a proportion of the total number of transfusions targeted, with a cap of 100%.	
In Year Payment Phasing & Profiling	
Front-loading of payment could be considered to help defray costs of capital equipment required.	
Rationale for Inclusion	
Appropriate use of automated exchange for patients with sickle cell disease (SCD) requiring exchange transfusion for the prevention of strokes etc Desired outcome - Greater use of automated exchange transfusion - Reduced complications of SCD - Reduced cost of chelation treatment - Improved patient access and experience Automated exchange is currently being reviewed by NICE but basic costing shows this is cost effective in terms of staff resource, bed day usage and chelation therapy	
Data Sources, Frequency and Responsibility for collection and reporting	
Additional dataset in addition to usual activity reporting which doesn't currently distinguish between manual and automated exchange.	
Baseline period/ date & Value	Baseline data will be available through a national audit and via Peer Review
Final indicator period/date (on which payment is based) & Value	As above
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	Using the CQUIN to fund automated exchange is a holding solution pending the development of an appropriate payment mechanism, e.g. through the introduction of an appropriate tariff code.

Supporting Guidance and References

Sickle cell disease (SCD) is the most common serious genetic disorder in England and affects 1 in 2000 live births, or 350 babies a year (NHS Screening Programmes 2010). Although the disease can vary in severity, all patients experience acute episodes of extreme pain that can have a negative effect on quality of life. For people with more severe forms of SCD, tissue damage can lead to organ failure and stroke. Life expectancy is considerably reduced at 45–55 years.

BSH guidance sets out requirements for exchange transfusion.

National Haemoglobinopathy Register includes data on SCD and requirements for exchange transfusion

Cost implications are mainly related to:

- Machine purchase if not available – the depreciation and maintenance costs
- Offset reduction in staff time
- Staff training if not available
- Blood product use

Overtime should be offset against other costs and avoided

Where a new machine is needed, a lead in of two quarters may be necessary.